

UTAH WIND WORKING GROUP

Minutes/Summary

Site/Time: Utah Wind Working Group Meeting was held April 6, 2005 at the Salt Lake City Public Library, 210 East 400 South in Salt Lake City Utah.

Objectives: (1) inform and educate members about wind resources and development in Utah, and (2) help remove barriers to wind development by creating a set of action items to focus the working group.

Facilitation: Sarah Wright (Utah Clean Energy) and Nykole Littleboy (Utah Geological Survey, State Energy Program).

The meeting convened at 10 a.m. followed by introductions of all participants.

10:15am - Terrah Anderson, Governor's Office of Planning and Budget - Update on Utah Energy Policy.

- Terrah Anderson informed the WWG of the Governor's plans to prioritize energy development and of the passage of SB 199, which will dissolve the Utah Energy Office (UEO) on May 15, 2005. As a result of this bill, the Clean Fuel Vehicles Grant and Loan Program will be transferred to the Department of Environmental Quality (DEQ), the State Building Energy Efficiency Program will be transferred to the Division of Facilities Construction and Management (DFCM), the State Energy Program (SEP) and the Utah Renewable Energy Tax Credit is now located at the Utah Geological Survey, and the Governor will be appointing an Energy Policy Advisor over the next two months. Terrah was available throughout lunch for questions.

10:30am - Joe Locurto, Director of Uinta County Economic Development - Economic Development Benefits of the Evanston, Wyoming 144 MW Wind Farm.

Logistics

- 80 1.5 megawatt Vestas wind turbines with 144 megawatt output
- \$143 Million construction costs
- 19 Utah communities agreed to purchase a portion of the output at wholesale
- the project created temporary local jobs during construction and permanent positions for operation of the wind farm

Revenue Generation

- \$6 Million of project value subject to local and state sales & use tax
- \$140 Million of project value subject to ad valorem taxation
- 2004 assessed value of project brought in \$1,212,749 to Uinta County
- About \$900,000 of this goes to schools and education

- \$2000 to \$4000 per year/per tower in royalties to private land owners
- Project impact funds during construction:
 - Evanston - \$78,447
 - Uinta County - \$39,223
 - Mountain View & Lyman - \$15,689 each
 - Bear River – \$7,844

11:00am - _____ Greg Probst - Update on PacifiCorp QF proceedings and potential impact on wind development in Utah.

- QF (qualifying facilities) proceedings could have significant impact on the viability of wind development in Utah.

There are four important issues:

1. Ownership of renewable energy credits or green tags
2. Capacity payment
3. Wind integration costs
4. Gas price and environmental hedging benefits of renewable energy sources

- Scheduling conference held on Wednesday, April 13th.

11:15am - _____ Ron Binz, author of *The Impact of a Renewable Energy Portfolio Standard on Retail Electric Rates in Colorado*.

- Study compares the economic and environmental impacts of using renewable energy versus fossil fuels such as coal and natural gas. Ron Binz is a consulting utility expert, and a veteran analyst of the utility industry, with more than 25 years experience. For 11 years until 1995, Binz was Consumer Counsel for the State of Colorado.

Conclusions

- RES will likely have minimal impact on rates;
- Varies by utility;
- Very unlikely to exceed 50¢ cap on residential rates;
- Wind savings offset solar costs
- Substantial air and water benefits
- Rural economic development benefits

12:00pm – Larry Flowers, Team Leader, National Renewable Energy Laboratory – Wind Powering America & Wind for Schools Pilot (Luncheon Speaker)

Overview

- Wind Powering America's strategies and state activities and management activities, publications and website
- Utility partnerships
- Wind resource mapping
- Native American outreach
- Rural economic development
- Distributed (small) wind

12:30pm - Jim Green, Senior Engineer, National Renewable Energy Laboratory - Utah's Wind Resource Assessment

- The State Energy Program has been working with NREL on a series of overlays, which depict developable wind resources on state lands. Wind class, accessibility to transmission lines and roads and those define the developable areas, which are not in a restricted area (Wilderness Areas etc.). UGS will continue to work with NREL on the project to determine developable wind resources on federally owned and private lands.
- This presentation can be found at geology.utah.gov

1:00pm - Facilitated discussion and development of White Paper wind briefing
Potential Components of White Paper

- Benefits/Savings
 - use Wyoming numbers until UT studies completed
 - large, medium, small and community wind
 - comparison with other energy resources (include external costs)
 - offset future growth
 - water resources
 - rural community development and quality of life
 - load distribution
 - stability (future investment)
 - homegrown
 - export capabilities
 - jobs
 - reduce air pollution
- Misconceptions
 - reliability/availability
 - economics
 - intermittency impacts
 - use credible sources (NREL Top Ten, NY Times Article)
 - not inconsistent with oil/gas production
 - can offset natural gas prices
 - define obstacles
 - risk assessment
- Studies
 - EPRI
 - Balanced Energy Plan for the West
 - USU?DOE global warming
 - ski resorts
 - UGS study-mercury (EPA)

- Partnerships
 - School and Institutional Trust Lands Administration (SITLA)
 - Specific small and large companies/businesses
 - emerging industry
 - equipment manufacturers
 - DEQ incentives
- Potential Policy Actions
 - Support in regulatory arena
 - RPS or Renewable Energy Standard (RES)
 - Education opportunities
 1. Environmental & Economic
 2. Techniques of other states/application to Utah –state models
 - Point out existing policies
 - Transmission/information clearinghouse
 - public desire (polls and Blue Sky Program)
 - lower cost financing (especially in rural communities)
- Costs
 - projected
 - supply curve
 - selling to CA and tax issues
- Barriers
 - economic and environmental regulations
 - Power purchase agreement
 - integration expenses
 - NIMBY (aesthetics)
 - Utah paradigm (promotion of wind power, reduce nuclear wastes)

*A committee will be formed to work on a draft of the paper, meeting scheduled tentatively for April 27th

** Please email either Nykole at nykolelittleboy@utah.gov or Sarah at sarah@utahcleanenergy.org if you would like to be involved in the creation of the white paper

3:00pm - Ed Stafford and Cathy Hartman - USU is the honored recipient of a \$500,000 DOE Wind Earmark. Ed and Cathy gave a brief update on the status of the earmark and potential activities planned to advance wind power.

Their study will focus on two main projects:

1. Research on the market and policy factors driving renewable energy development in Utah and,
2. A peer-reviewed website of "wind facts" geared for policy makers.

3:15pm - Philippe Wyffels, Business Manager of The Leonardo @ Library Square - Sustainability Showcase in Salt Lake City

- More info can be found at www.theleonardo.org/

3:30pm - Meeting adjourned

Attendee list for UWWG meeting – April 6, 2005, Public Library, SLC, 4th Floor

In order received:

- | | | |
|-----|-------------------------|---|
| 1. | Ron Binz | Public Policy Consultant |
| 2. | Jim Green | National Renewable Energy Laboratory |
| 3. | Joe Locurto | Uinta County, Wyoming Economic Development |
| 4. | Greg Probst | Energy Consultant |
| 5. | Larry Flowers | National Renewable Energy Laboratory, Wind Powering America |
| 6. | Terrah Anderson | Governor's Office of Planning and Budget |
| 7. | Sarah Wright | Utah Clean Energy |
| 8. | Glade Sowards | State Energy Program |
| 9. | Cheryl Murray | Utah Committee of Consumer Services |
| 10. | Mike Adams | Interested citizen, Land owner |
| 11. | Brylan Schultz | Interested citizen |
| 12. | Laird Jenkins | Beaver School District |
| 13. | Mike Malmquist | Parsons Behle & Latimer |
| 14. | Tim Parkinson | Utah National Guard |
| 15. | Mark Holt | Electrical Engineer, USU |
| 16. | Lorin Mortensen | Mechanical Engineer, USU |
| 17. | Craig Hansen | Windward Engineering LC |
| 18. | Gary D. Tassainer | TASCO |
| 19. | Tim Wagner | Sierra Club Utah Chapter |
| 20. | Keith Hill | Desert Power |
| 21. | Ivan Weber | Weber Sustainability Consulting |
| 22. | Vicki Kennedy-Overfeld | Interested Citizen |
| 23. | John Seymour | FPL Energy |
| 24. | John Campos | St George Steel Fabricating |
| 25. | Bruce Munson | Johnson Controls |
| 26. | Gar Workman | Progressive Solutions, LLC |
| 27. | Gil Miller | Progressive Solutions, LLC |
| 28. | Christine Watson Mikell | Isotruss Structures |
| 29. | Roger Swenson | E-Quant Consulting |
| 30. | Anne Buccanbuso | Interested citizen |
| 31. | Reed Balls | Utah Farm Bureau |
| 32. | Todd Bingham | Utah Farm Bureau |
| 33. | Bruce Adams | San Juan County Commissioner |
| 34. | Cheryl Heying | Division of Air Quality |
| 35. | Elizabeth Brereton | Utah Division of Public Utilities |
| 36. | Nykole Littleboy | State Energy Program |
| 37. | Marty Banks | Stoel Rives |

*Thank you to all those that attended, especially those who traveled long distances! *Note, we were only able to include those participants that signed the participant list, we apologize for any that we may have missed.

